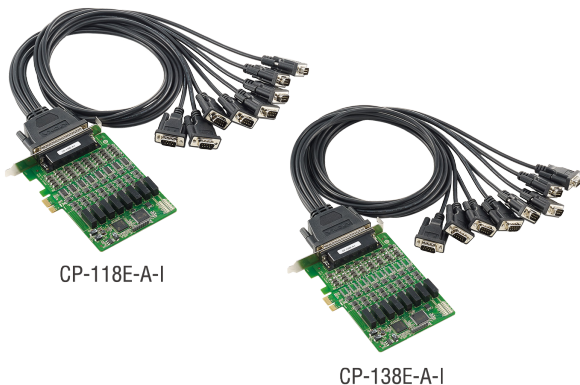


CP-118E-A-I/138E-A-I

8-port 3-in-1, RS-422/485 PCI Express board with 4 kV surge protection and 2 kV electrical isolation



CP-118E-A-I

CP-138E-A-I



- > PCI Express x1 compliant
- > Serial communication speed up to 921.6 kbps
- > 128-byte FIFO and on-chip S/W flow control
- > Variety of connection cables and boxes available for RS-232/422/485
- > Drivers provided for the latest versions of Windows, Linux, and Unix
- > Easy maintenance with on-board LED display and management software



Overview

The CP-118E-A-I and CP-138E-A-I are smart PCI Express multiport serial boards designed for POS and ATM applications, and for use by industrial automation system manufacturers and system integrators. The CP-118E-A-I and CP-138E-A-I are compatible with all popular operating systems, and each of their 8 serial ports supports data rates

of up to 921.6 kbps and provide full modem control signals, ensuring compatibility with a wide range of serial peripherals. In addition, the CP-118E-A-I and CP-138E-A-I work with PCI Express x1, allowing the boards to be installed in any PCI Express slot.

Intelligent RS-485 for Easy Installation and Troubleshooting (Patent Pending)

Setting up an RS-485 network is relatively straightforward. The challenge comes when the power is turned on and the devices connected to the network start transmitting and receiving data. In most cases, engineers will need to further tune the system by configuring pull high/low resistors and terminators at strategic points along

the network. Moxa's new Intelligent RS-485 technology supports two essential features to make it easy: (1) One-Click Installation automatically analyzes the network topology and then adjusts terminators and pull high/low resistors. (2) One-Click Troubleshooting tells you what to change to make a deficient network viable.

Specifications

Hardware

Comm. Controller: 16C550C compatible

Bus: PCI Express x1

Connector: DB78 female

Serial Interface

Number of Ports: 8

Serial Standards:

CP-118E-A-I: RS-232/422/485

CP-138E-A-I: RS-422/485

Max. No. of Boards per PC: 8

Serial Line Protection

Surge Protection: 4 kV

Electrical Isolation: 2 kV

Performance

Baudrate: 50 bps to 921.6 kbps

Serial Communication Parameters

Data Bits: 5, 6, 7, 8

Stop Bits: 1, 1.5, 2

Parity: None, Even, Odd, Space, Mark

Flow Control: RTS/CTS, XON/XOFF, RTS Toggle (RS-232 only)

Serial Signals

RS-232: TxD, RxD, RTS, CTS, DTR, DSR, DCD, GND

RS-422: TxD+(B), TxD-(A), RxD+(B), RxD-(A), GND

RS-485-4w: TxD+(B), TxD-(A), RxD+(B), RxD-(A), GND

RS-485-2w: Data+(B), Data-(A), GND

Physical Characteristics

Dimensions: 107 x 136.9 mm (4.21 x 5.39 in)

Driver Support

Windows: Windows 2000/XP/2003/Vista/2008/7/8/8.1/10 (x86/x64), Windows Server 2008 R2/2012/2012/2016 R2 (x64), DOS

Linux: Linux 2.4.x, 2.6.x, 3.x

Unix-like Systems: QNX 6, SCO OpenServer, UnixWare 7, Solaris 10 (x86/x64)

Note: Please refer to Moxa's website for the latest driver support information.

Environmental Limits

Operating Temperature: 0 to 55°C (32 to 131°F)

Storage Temperature: -20 to 85°C (-4 to 185°F)

Ambient Relative Humidity: 5 to 95% (non-condensing)

Standards and Certifications

EMC: EN 55032/24

EMI: CISPR 32, FCC Part 15B Class B

EMS:

IEC 61000-4-2 ESD: Contact: 4 kV; Air: 8 kV

IEC 61000-4-3 RS: 80 MHz to 1 GHz: 3 V/m

IEC 61000-4-4 EFT: Power: 1 kV; Signal: 0.5 kV

IEC 61000-4-5 Surge: Power: 2 kV; Signal: 4 kV

IEC 61000-4-6 CS: 150 kHz to; 80 MHz: 3 V/m; Signal: 3 V/m

IEC 61000-4-8 PFMF

MTBF (mean time between failures)

Time:

CP-118E-A-I: 390,883 hrs

CP-138E-A-I: 221,331 hrs

Standard: Telcordia (Bellcore) TR/SR

Power Requirements

Input Current:

CP-118E-A-I: 2,356 mA @ 3.3 VDC

CP-138E-A-I: 2,356 mA @ 3.3 VDC

Warranty

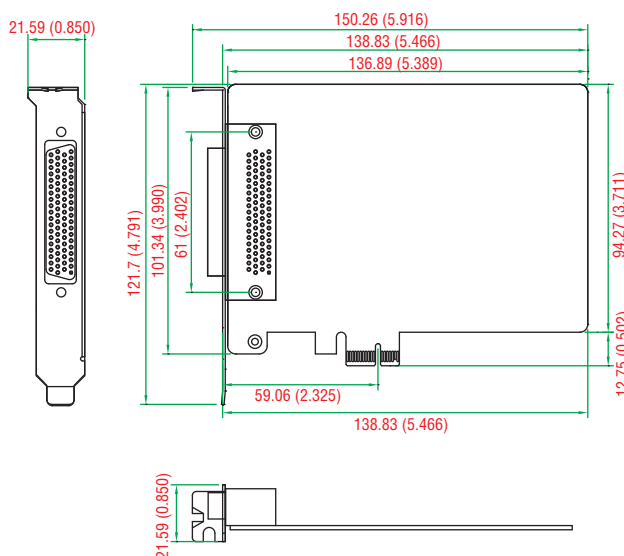
Warranty Period: 5 years

Details: See www.moxa.com/warranty

Dimensions

Unit: mm (inch)

CP-118E-A-I/CP-138E-A-I



Ordering Information

Available Models

CP-118E-A-I: 8-port RS-232/422/485 PCI Express x1 serial board w/ surge protection and electrical isolation

CP-138E-A-I: 8-port RS-422/485 PCI Express Smart x1 serial board w/ surge protection and electrical isolation

Connection Options (can be purchased separately)

CBL-M78M9x8-100: M78 to 8 x DB9-M cable, 100 cm

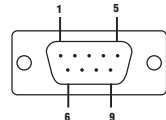
CBL-M78M25x8-100: M78 to 8 x DB25-M cable, 100 cm

Package Checklist

- 1 CP-118E-A-I or CP-138E-A-I board
- Documentation and software CD
- Quick installation guide (printed)
- Warranty card

CBL-M78M9x8-100

DB9 male



CBL-M78M25x8-100

DB25 male

